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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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03/23/2004

Yoji Nagase

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EXAMINER

CHOW, YUK

ART UNIT

PAPER NUMBER

2629

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/806,827	Applicant(s) NAGASE, YOJI	
	Examiner YUK CHOW	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/28/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/08/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimomaki (US 2002/0057243).

As to claim 1, Shimomaki discloses a method of driving an active matrix type liquid crystal display panel during horizontal scanning periods, using a data signal whose polarity is inverted at the beginning and end of each horizontal scanning period, the driving method also using a gate signal which is raised and broken down at spaced intervals, a selected horizontal scanning period occurring at least in part while the gate signal is raised, comprising the step of:

performing a pre-scanning and a main scanning to each horizontal line using the gate signal (see Fig. 2A (P1, P2));

wherein the gate signal is raised in the main scanning at a timing on or after a first inversion of the data signal (see Fig. 2A, P2 raise after first inversion, Vsig has gone negative from the positive) occurring during the selected horizontal scanning period, and the gate signal is broken down in the main scanning at a timing prior to the next following inversion of the data signal occurring during the selected horizontal scanning period (See Fig. 2A, P2 is broken down before the next inversion occurs).

As to claim 2, Shimomaki discloses a method of driving a liquid crystal display panel according to claim 1,

wherein the timing for raising the gate signal relative to inverting the polarity of the data signal in the pre-scanning is the same as the timing for raising the gate signal relative to inverting the polarity of the data signal in the main scanning (See Fig. 2A, TA is same as TB).

As to claim 3, Shimomaki discloses a method of driving an active matrix type liquid crystal display panel, comprising the step of:

performing a pre-scanning and a main scanning to each horizontal line (see Fig. 2A (P1, P2);

wherein a value of an on-voltage of a gate signal in the pre-scanning is different from a value of an on-voltage of the gate signal in the main scanning (see 2A(V1 and V2 are not the same).

As to claim 4, Shimomaki discloses a method of driving an active matrix type liquid crystal display panel, comprising the step of:

performing a pre-scanning and a main scanning to each horizontal line (see Fig. 2A (P1, P2);

wherein a length between timing of raising of a gate signal and timing of next following breaking down of the gate signal in the pre-scanning period is different from that in the main scanning period (see Fig. 2A, Vsig during P1 is not the same in P2).

As to claim 5, Shimomaki discloses a method of driving an active matrix type liquid crystal display panel using a data signal whose polarity is inverted for every horizontal scanning period, comprising the step of:

performing a pre-scanning and a main scanning to each horizontal line (see Fig. 2A (P1, P2);

wherein the horizontal scanning period has a pre-writing data voltage period where the pre-scanning is performed and the main scanning is not performed and another period where the main scanning is performed (see [0021]-[0023]), and a value of a predetermined pre-writing data voltage that is a data voltage in the pre-writing data voltage period is different from a value of a display data voltage that is a data voltage in said another period (see Fig. 2A, V_{p1} is different in P1 and P2).

As to claim 6, Shimomaki discloses a method of driving a liquid crystal display panel according to claim 5,

wherein the predetermined pre-writing data voltage is the one of an intermediate gray scale (see [0129]).

As to claim 7, Shimomaki discloses a method of driving a liquid crystal display panel according to claim 5,

wherein the predetermined pre-writing data voltage is the one between a white voltage and a black voltage of the same polarity as the polarity of the data signals in the main scanning (see [0129]).

As to claim 8, Shimomaki discloses a method of driving a liquid crystal display panel according to claim 5,

wherein the predetermined pre-writing data voltage is an average gray scale voltage in a frame period for pixels along the data line (see [0043]).

As to claim 9, Shimomaki discloses a method of driving a liquid crystal display panel according to claim 5,

wherein the predetermined pre-writing data voltage (Fig. 2A(V1)) is the one during a main scanning period when the pre-scanning is just preceding the main scanning (see [0057]).

As to claim 10, Shimomaki disclose a method of driving a liquid crystal display panel according to claim 5,

wherein the pre-writing data voltage is a voltage that is corrected by an amount of change in a pixel voltage stemming from the break-down of the gate signal at the end of the pre-scanning (see Abstract).

As to claim 11, Shimomaki discloses a method of driving an active matrix type liquid crystal display panel, comprising the step of:

performing a pre-scanning and a main scanning to each horizontal line (see Fig. 2A (P1, P2);

wherein a value of a gate-off voltage between the pre-scanning period and the main scanning period is set to be higher than a value of the gate-off voltage after the main scanning period (see Fig. 2A, Vp1 is higher between TA and TB).

As to claim 12, Shimomaki discloses an active matrix type liquid crystal display panel comprising a drive circuit driven by a method of driving a liquid crystal display panel according to claim 1 (see Abstract).

Response to Arguments

3. Applicant's arguments with respect to claim 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./

Examiner, Art Unit 2629

/Amare Mengistu/

Supervisory Patent Examiner, Art Unit 2629